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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,103	01/18/2002	Kenichiro Takada	12-019	6555
23400	7590	01/21/2004	EXAMINER	
POSZ & BETHARDS, PLC 11250 ROGER BACON DRIVE SUITE 10 RESTON, VA 20190			ANGEBRANDT, MARTIN J	
			ART UNIT	PAPER NUMBER
			1756	

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,103

Applicant(s)

TAKADA, KENICHIRO

Examiner

Martin J Angebrannt

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/20/02 & 7/16/02.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2&3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1756

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims should recite successive exposures and indicate what changes between the successive exposures. The shielding a portion of the photosensitive medium from the reference beam by the mirror should also be recited.

In claims 7 and 8, where are these angles measured from ? Is it not clear if these are measured relative to the plane of the photosensitive member or to the normal extending from it.

In claim 11, is this in the plane of the photosensitive members ?

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7-10 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Hattori et al. '670.

See figures 34 and 35, which show an assemblage meeting the limitations of the claims. Figure 35 shows mirror 82 to be a separate part, which being a separate part, is held to be removable. The use of masking techniques where both the photosensitive medium and the diffuser are masked are also disclosed. (17/13-57). The use of rotation to selectively expose a portion of the holographic recording medium is disclosed. (6/24-44). The use of shifting of the photosensitive medium is disclosed. (6/7-23). The lamination of plural holograms together edge to edge is disclosed throughout. See figure 37 and corresponding text.

The claims do not preclude any means for this disassembly. The examiner interprets “fixedly connected” (18/26-34) to indicate that they do not slide relative to one another. Claim 10 and the specification at page 22 at lines 1-9 specifically recite replacing the mirror and being a separate piece, the examiner holds that this functionality is met.

With respect to claims 5 and 6, the teachings of figure 37 meets that limitation as the reflection off the mirror acts as the reference beam and this travels a shorter distance than the distance between the diffuser and the photosensitive medium.

The vagueness of the angle descriptions allow the description with respect to figure 34 and the off axis reference beam arrangement to meet this claim.

6. Claims 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. ‘670, in view of Takada et al. EP 828202.

Takada et al. EP 828202 teaches with respect to figure 3, the shifting of the diffuser relative to the photosensitive media to prevent hologram formation in the lower portion due to the blocking of the reference beam. (16/13-21). Figure 16 teaches an arrangement, where a mirror is placed adjacent and perpendicular to the diffuser. (23/35-24/10) Figure 9 teaches a

Art Unit: 1756

diffusion member with a pinhole in it to allow reference light to pas through it undiffused (20/1-34). Figure 18 is used to teach the shifting of the object light relative to the photosensitive medium to vary the field of the view of the diffuser image. (24/45-26/1).

It would have been obvious to one skilled in the art to modify the invention of Hattori et al. '670, particularly with respect to figure 34, by changing the distance between the recording medium and both the light and the diffuser/mirror assembly to record plural holograms with different fields of view. Note that the claims do not describe preventing exposure of other portions of the photosensitive material, but this is not specifically precluded by the claims due to the open claim language. The movement will change both the distances and the angles discussed in the claims.

7. Claims 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. '670, in view of Takada et al. EP 828202, further in view of Ori US 2001/0005317.

Ori US 2001/0005317 teaches exposure at different distances when forming a diffuse holographic screen

In addition to the basis provided above, the examiner points to Ori US 2001/0005317, to support the combination of the Hattori et al. '670, in view of Takada et al. EP 828202 and the desirability of the formation of holograms which replay at different distances.

8. The following claims are allowable over the prior art, but are rejected under 35 USC 112 as discussed above.

Claims 1,2 are allowable over the prior art of record as the replacement of the mirror is not disclosed.

Art Unit: 1756

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Brandstetter et al. '022 teach shifting of the recording medium between exposures with respect to figure 2.


Wada JP 01-017084 teach shifting of the recording medium between exposures with respect to figures 2,4 and 5.

Kanda et al. '390 teach holographic recording with diffuser/mirror apparatus.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J Angebrannndt whose telephone number is 571-272-1378. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9309 for regular communications and 703-872-9309 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Martin J Angebrannndt
Primary Examiner
Art Unit 1756

January 15, 2004